

MEMORANDUM

TO: Joanna French P.E. 

FROM: Ravi Rangan, P.E. 

SUBJECT: Delaware City Refining Company
7 DE Admin. Code 1130 Significant Permit Modification - PROPOSED
Permit: AQM-003/000016 – Part 1 (Renewal 2)(Revision 1)
Permit: AQM-003/000016 – Part 2 (Renewal 1)(Revision 2)
Permit: AQM-003/000016 – Part 3 (Renewal 2)(Revision 1)

DATE: February 7, 2017

BACKGROUND

Delaware City Refining Company (DCRC) submitted AQM-1001 series applications for significant permit modifications to its 7 DE Admin. Code 1130 permit pursuant to 7 DE Admin. Code 1130 on March 6, 2014, May 15, 2015 and June 30, 2016. A "Draft/Proposed" significant permit modification to its operating permit was drafted by DAQ and advertised for public notice on December 28, 2016. The 30-day public review period expired on January 27, 2017. The Department did not receive any comments from the public and affected neighboring states, nor was there a request for a public hearing. However, the Department received comments from the US EPA in an e-mail dated January 26, 2017 from David Talley addressed to Ravi Rangan. This memorandum addresses DAQ's responses to the EPA's comments. Furthermore, DAQ is incorporating a notification requirement in this proposed significant permit modification for emission units which have prescribed emissions and operational limitations addressing planned start up and shut down scenarios. DAQ has developed the attached "Proposed" significant permit modification for EPA's review.

APPLICATION

The Table below provides DAQ's response to the e-mail comments on the "Proposed" permit made by the US EPA in an e-mail dated January 26, 2017 from David Talley to Ravi Rangan.

Comment Number	Commenter and Description of Comment	Action Taken By DAQ
1	EPA: According to the discussion in the Technical Review Memo, Permit: APC-97/0503-Construction (Amendment 10)(NSPS), relating to the SCR system for the combined cycle units, was issued on July 2, 2014, and was included in the facility's application for the significant modification. However, the provisions of this construction permit were not incorporated into the title V permit "...because an operation permit has not been issued at this time." The provisions of this permit are "applicable requirements" pursuant to 40 CFR 70.2 and 7 DE Admin. Code 1130 Section 2.0, and as such, should be incorporated into the title V permit.	DAQ concurs. The construction of the SCR system has been completed. Furthermore, because the construction permit was issued as a federally enforceable construction permit and the associated legal notice on 05.18.2014 provided a 30 day review period for EPA and public comments, DAQ is now administratively transferring the applicable permit conditions in Permit: APC-97/0503-Construction (Amendment 10)(NSPS), into this Proposed TV permit.
2	EPA: According to the Technical Review Memo, Condition 2.1.3 from the 7 DE Admin. Code 1102 permit relating to Heater 134-H-101 at the Olefins Plant limits PM/PM ₁₀ , and PM _{2.5} emissions to 0.3 lb/MMBTU (2-hr average), and 0.8 tons/year (TPY). However, Condition d.1.i of Part 1, Condition 3, Table 1 from the title V permit, which incorporates that provision, only addresses "PM." The title V	DAQ concurs.

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	permit should be revised to include PM ₁₀ and PM _{2.5} .	
3	EPA: Condition No. g.1.iii.B of Part 1, Condition 3, Table 1, relating to the leak detection requirements for ether plant the cooling tower states the following: "Compliance with the MACT Heat Exchanger Leak Detection Requirements shall be based on information available to the Department concerning the Company's actions with respect to such events and shall include the Department's review of all available facts and circumstances including, but not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source." However, there do not appear to be any monitoring or record keeping requirements which would identify what information should be "available" to the Department for compliance demonstration purposes. As such, this condition as it is does not assure compliance with the leak detection requirements applicable to the unit (40 CFR 63.654). The permit should be revised to clearly identify what information must be gathered and maintained by DCRC to demonstrate compliance with the leak detection requirements.	DAQ notes that Condition g.1.iv.A of the draft/proposed permit prescribes the monitoring/testing requirements. DAQ concurs that the applicable recordkeeping and reporting requirements in 40 CFR 63.655 are necessary elements in the proposed permit and has accordingly included these requirements.
4	EPA: Condition a.5.i.3 of Part 3, Condition 3, Table 1 establishes a NOx emissions limit of 0.16 lb/mmBTU for Boilers 3 and 4. However, the permit condition exempts the boilers from complying with the limit during periods of start-up and shutdown not exceeding 6-hours. Such an exemption is contrary to EPA's Start-up, Shutdown, and Malfunction (SSM) policy, and inconsistent with our SSM "SIP Call," published on June 12, 2015 (80 FR 33840).	DAQ disagrees with EPA's comment. First, Boilers 3 and 4 are steam generation units that run for extended periods of time spanning 36 to 48 months between turnarounds. Therefore, a limited exemption from the rate based emission limitation of 0.16 lb/mmBtu not to exceed 6 hours during periods of start up and shut down is neither unreasonable nor inconsistent with good engineering and good air pollution practices. Second, because the entire facility has a NOx cap in place in the form of an annual mass emission limitation of 1,650 TPY which is applicable at all times including periods of start up, shut down and malfunction (See Conditions jb.1.i.C and jb.1.ii.E), DAQ is satisfied this limited exemption does not jeopardize the NOx Cap in any manner. Finally, DAQ does not find this limited exemption to be inconsistent with EPA's SSM SIP call which specifically addresses SSM provisions in 7 DE Admin. Code 1104, 1105, 1108, 1109, 1114 and 1142. On the other hand, this limited exemption is based on 7 DE Admin. Code 1102 to address engineering and good air pollution practices.
5	DNREC DAQ: Emissions Units 21, 22, 23 and 28 have specific applicable emissions limitations addressing planned start up and shut down scenarios. DAQ finds it necessary to incorporate a notification requirement in the boiler plate	DAQ is incorporating a new Condition 3.c.2.vii in the proposed permit to notify the Department at least 24 hours prior implementing a planned start up or shut down of an emission unit with

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	section of the permit for these affected emissions units.	specific applicable emissions limitations addressing planned start up and shut down scenarios.

RECOMMENDATION

It is recommended that the attached Proposed permits (**Permit: AQM-003/000016 – Part 1 (Renewal 2)(Revision 1)**; **Permit: AQM-003/000016 – Part 2 (Renewal 1)(Revision 1)**; and **Permit: AQM-003/000016 – Part 3 (Renewal 2)(Revision 1)**) be transmitted to EPA Region III for its review.

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pc: Dover Title V File

